

WHAT IS CLAIMED IS:

1. An image forming apparatus comprising:

an electron-source substrate having a plurality of cold-cathode electron emitting elements, each having an electron emitting portion and a pair of element electrodes;

an acceleration electrode for applying an acceleration voltage operating on electrons emitted from the electron emitting elements, disposed so as to face the electron emitting elements;

a spacer disposed between said electron-source substrate and said acceleration electrode;

a wiring portion formed on said electron-source substrate for driving the electron emitting elements, these components being accommodated within an envelope; and

an electron-trajectory correcting electrode for correcting beam deviation due to charging of said spacer, provided near an electron emitting element near said spacer.

2. An image forming apparatus comprising:

an electron-source substrate having a plurality of electron emitting elements;

an acceleration electrode for applying an acceleration voltage operating on electrons emitted from the electron emitting elements, disposed so as to face the electron emitting elements;

a spacer disposed between said electron-source substrate and said acceleration electrode;

a wiring portion formed on said electron-source substrate for driving the electron emitting elements, these components being accommodated within an envelope; and

an electron-trajectory correcting electrode for deflecting a trajectory of electrons emitted from an electron emitting element closest to said spacer so as to be separated from said spacer, disposed on said electron-source substrate in a state of being separated from said spacer.

3. An image forming apparatus according to Claim 2, wherein said electron-trajectory correcting electrode is disposed on a surface of said electron-source substrate where the electron emitting elements are disposed.

4. An image forming apparatus according to Claim 2, wherein said electron-trajectory correcting electrode is disposed on said wiring portion.

5. An image forming apparatus according to Claim 2, wherein said electron-source substrate has a plurality of lines of the electron emitting elements, wherein said spacer is disposed for each of the plurality of lines, and said electron-trajectory correcting electrode is disposed between said spacer and one of the plurality of lines closest to said spacer.

6. An image forming apparatus according to Claim 5, wherein said electron-trajectory correcting electrode is disposed on a surface of said electron-source substrate where the electron emitting elements are disposed.

7. An image forming apparatus according to Claim 5, wherein said

electron-trajectory correcting electrode is disposed on said wiring portion.

8. An image forming apparatus according to Claim 2, wherein said electron-source substrate has a plurality of lines of the electron emitting elements, wherein said spacer is disposed for each of the plurality of lines, and said electron-trajectory correcting electrode is disposed so as to sandwich said spacer and one of the plurality of lines closest to said spacer.

9. An image forming apparatus according to Claim 8, wherein said electron-trajectory correcting electrode is disposed on said wiring portion.